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学位論文の題名	Hyperglycemia is associated with psoriatic inflammation in both humans and mice (ヒトおよびマウスにおける乾癬炎症と高血糖の相関について) Journal of Investigative Dermatology : 139(6) : 1329-1338, 2019
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Chronic inflammation can cause several metabolic syndromes. Patients with psoriasis, a chronic immunological skin inflammation, often develop diabetes. However, it is not clear how psoriasis leads to, or is correlated with, glucose intolerance. Here, we investigate whether psoriasis itself is correlated with hyperglycemia in humans and mice. In patients, the severity of psoriasis was correlated with high blood glucose levels, and treatment of psoriasis improved insulin secretion and Hemoglobin A1c. In mice, Imiquimod-induced systemic and cutaneous inflammation also resulted in hyperglycemia. Although it should be determined if psoriasis-like cutaneous inflammation alone can induce hyperglycemia, Imiquimod-treated mice showed impairment of insulin secretion without significant islet inflammation. Administration of anti-IL-17A monoclonal antibody improved hyperglycemia in psoriatic patients and imiquimod-treated mice with psoriasiform features. These results suggest that hyperglycemia is highly associated with psoriasis, mainly through IL-17.